

IN THE CLAIMS

Please amend the claims as follows. This listing of the claims will replace all prior versions and listings of the claims in the application:

1. **(Original)** A method of identifying a human subject having increased sensitivity to warfarin, comprising detecting in the subject the presence of a single nucleotide polymorphism in the VKOR gene, wherein the single nucleotide polymorphism is correlated with increased sensitivity to warfarin, thereby identifying the subject having increased sensitivity to warfarin.

2. **(Original)** The method of claim 1, wherein the single nucleotide polymorphism in the VKOR gene is a G→C alteration at nucleotide 2581 of the nucleotide sequence of SEQ ID NO:11.

3. **(Original)** A method of identifying a human subject having increased sensitivity to warfarin, comprising:

- a) correlating the presence of a single nucleotide polymorphism in the VKOR gene with increased sensitivity to warfarin; and
- b) detecting the single nucleotide polymorphism of step (a) in the subject, thereby identifying a subject having increased sensitivity to warfarin.

4. **(Original)** A method of identifying a single nucleotide polymorphism in the VKOR gene correlated with increased sensitivity to warfarin, comprising:

- a) identifying a subject having increased sensitivity to warfarin;
- b) detecting in the subject the presence of a single nucleotide polymorphism in the VKOR gene; and
- c) correlating the presence of the single nucleotide polymorphism of step (b) with the increased sensitivity to warfarin in the subject, thereby identifying a single nucleotide polymorphism in the VKOR gene correlated with increased sensitivity to warfarin.

5. **(Original)** A method of correlating a single nucleotide polymorphism in the VKOR gene of a subject with increased sensitivity to warfarin, comprising:

- a) identifying a subject having increased sensitivity to warfarin;
- b) determining the nucleotide sequence of the VKOR gene of the subject of (a);
- c) comparing the nucleotide sequence of step (b) with the wild type nucleotide sequence of the VKOR gene;
- d) detecting a single nucleotide polymorphism in the nucleotide sequence of (b); and
- e) correlating the single nucleotide polymorphism of (d) with increased sensitivity to warfarin in the subject of (a).

6. **(Original)** A method of identifying a human subject having decreased sensitivity to warfarin, comprising detecting in the subject the presence of a single nucleotide polymorphism in the VKOR gene, wherein the single nucleotide polymorphism is correlated with decreased sensitivity to warfarin, thereby identifying the subject having decreased sensitivity to warfarin.

7. **(Original)** The method of claim 6, wherein the single nucleotide polymorphism in the VKOR gene is a T→C alteration at nucleotide 3294 of the nucleotide sequence of SEQ ID NO:11.

8. **(Original)** The method of claim 6, wherein the single nucleotide polymorphism in the VKOR gene is a G→A alteration at nucleotide 4769 of the nucleotide sequence of SEQ ID NO:11.

9. **(Original)** A method of identifying a human subject having decreased sensitivity to warfarin, comprising:

- a) correlating the presence of a single nucleotide polymorphism in the VKOR gene with decreased sensitivity to warfarin; and

b) detecting the single nucleotide polymorphism of step (a) in the subject, thereby identifying a subject having decreased sensitivity to warfarin.

10. **(Original)** A method of identifying a single nucleotide polymorphism in the VKOR gene correlated with decreased sensitivity to warfarin, comprising:

- a) identifying a subject having decreased sensitivity to warfarin;
- b) detecting in the subject the presence of a single nucleotide polymorphism in the VKOR gene; and
- c) correlating the presence of the single nucleotide polymorphism of step (b) with the decreased sensitivity to warfarin in the subject, thereby identifying a single nucleotide polymorphism in the VKOR gene correlated with decreased sensitivity to warfarin.

11. **(Original)** A method of correlating a single nucleotide polymorphism in the VKOR gene of a subject with decreased sensitivity to warfarin, comprising:

- a) identifying a subject having decreased sensitivity to warfarin;
- b) determining the nucleotide sequence of the VKOR gene of the subject of (a);
- c) comparing the nucleotide sequence of step (b) with the wild type nucleotide sequence of the VKOR gene;
- d) detecting a single nucleotide polymorphism in the nucleotide sequence of (b); and
- e) correlating the single nucleotide polymorphism of (d) with decreased sensitivity to warfarin in the subject of (a).

12-16. **(Canceled).**